

DMFE Mission

The Defense Automated Warning System Message Front End (DMFE) is a stand-alone, modular automated message handling system that is tunable to specific organizational requirements. The DMFE application accommodates Military as well as Press message traffic (AP, UPI, Reuters, and FBIS). The DMFE application is currently implemented on Sun and DEC workstations interfacing with Sun servers. DMFE includes the following Message Support features:

Sectional Messages:

The Sectional Message processing feature identifies and automatically assembles sectional messages. Individual message sections are retained on-line until all message sections have arrived and are then automatically linked. A user-friendly interface provides easy access and usability for analyst intervention. The user may view any of the sections before linking, or may override the waiting period to force linking of available sections. The time lapse between message receipt and automated sectional processing is tunable based on site-specific message processing requirements. The Sectional Message process is totally configurable to meet individual sectional message processing implementation requirements.

Message Cataloging:

DMFE Message Cataloging determines the message type by isolating the subject line, tags line, originator, precedence, and message text found within the message format. From this identification, notification is provided to predetermined groups of analysts in the form of an alert broadcast message. These messages inform analysts of specific message receipt or important events. The criteria for immediate message receipt notification can be tailored to accommodate specific site requirements.

Message Analysis:

The Message Analysis capability provides for message text display and review. Message text may be cut and copied into user workfiles, incorporated into outgoing messages, mailed to other analysts, or printed to hardcopy. To enhance the message review process, specific text - word or phrase patterns - can be highlighted through the use of a search capability. Highlighted text can be implemented in several user-defined manners which are designed to directly support intelligence analysis.

Historical Query:

Any military message that has been received and archived by DMFE may be accessed/retrieved through the Historical Query application. This application allows the user to retrieve historical messages based on received date/time range, a specific date time group, message type, originator, and keywords. The user may also retrieve a message directly based on a unique identification number assigned to the message by the DMFE message processing application. A historical query mechanism also exists for Press messages; however, this is only valid for the Press messages that are on-line.

Message Profiles:

Message Profiles provides the capability to profile against incoming messages and group message traffic based upon message type, originating organization, area of interest, communication lines, or message content (keyword matching and geographic locations), or any combination of the above. Profiles are constructed from templates that provide an easy "fill in the blank" interface. Template entries can be accomplished manually, or by selection of items from a legal values list associated with individual fields. Keyword matching provides the mechanism for interpreting message content. The analyst can use multiple keywords to

define a profile; the number of keywords requiring a match is independently defined within each profile. Geographic location place names or coordinates can also be used to discriminate message traffic; geographic locations within a message can also be used to associate the message with an area of interest. The capability to activate/deactivate Message Profiles allows development of profiles for future use without premature implementation, maintenance of profiles used in past profiling activities without having to remove them from the system, and activation and/or deactivation of any subset thereof. The profiling process incorporates the ability to allow access to messages on an individual or group basis. Messages are automatically disseminated to each member of a specified group when a message matches a profile, and hardcopies can be automatically generated for predetermined messages on pre-selected printers. Each profile is assigned a time to live that provides automatic purging of the profile match lists.

Message Data Extraction:

The Data Extraction process provides automatic database update based upon incoming message content. The process is easily activated or deactivated for site-specific implementations. The Extraction application provides the analyst with tools to correct erroneous messages, remove messages that do not need to be processed through the system, or process messages "as is."

Message Archive:

Military messages are archived to disk upon completing message pipeline processing and analysis. This archive is available on-line for historical retrieval from both short and long-term archive repositories. Press messages are currently placed into an on-line Press message database and held for a specified period before being deleted from the system. The specified period (number of days) these messages remain in the database is fully tunable and only limited to the capacity of implemented data storage devices.

Message Generation:

The Message Generation mechanism provides creation and release of outgoing messages. This mechanism uses message template forms that assure compatibility with required message formats and precludes redundant, time consuming text entry. A mechanism also exists for the user to create site-specific templates for newly defined outgoing or internal messages.

Discretionary Access to Messages:

The Discretionary Access System, which is part of the DMFE message indexing and review systems, allows a site to specify what messages each DMFE user is allowed to review, based upon access markings contained in the messages. These markings are based upon message classification or other special text patterns. A site may define up to 128 classification markings and up to 128 site-unique markings.